

in the PMA is not identical to the size of an actually-recorded track and that a lead-in area has wrong position information on the next recording position or has not, the microcomputer 36 may inform a user of the abnormal condition by outputting 5 an advisory message, and correct wrong information, if it is rewritable and correctable, according to the request of a user.

The method and apparatus for determining a recordable position of a writable disk according to the present invention, enables new data not to be overwritten onto previous data of 10 which recording was interrupted by a servo or writing fail caused from a mechanical shock, thereby preventing new data to be recorded as well as previous data from being damaged or lost.

The invention may be embodied in other specific forms without departing from the spirit or essential characteristics 15 thereof. The present embodiments are therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description and all changes which come within the meaning and range of equivalency of the claims are 20 therefore intended to be embraced therein.

What is claimed is:

1. A method of searching for a recordable position of a writable disk, comprising the steps of:

(a) reading data recording information of the writable 25 disk;

(b) examining whether an area after a recordable position indicated by the read data recording information has recorded data or not; and

(c) changing the recordable position to other position 30 for new input data based on the examination result.

2. The method set forth in claim 1, wherein the data recording information consists of track position information of a program memory area and lead-in area information.

3. The method set forth in claim 1, wherein said step (b) scans a predetermined amount of physical tracks as checking whether a reproduced signal is changed from binary-toggling state to a constant level.

5 4. The method set forth in claim 3, wherein the predetermined amount of physical tracks is longer than a pause section specified to be gapped between two tracks.

10 5. The method set forth in claim 1, wherein said step (c) closes recorded data located ahead of the examined actual final position of recorded data in a session, and determines a new recordable position apart from the closed session.

6. The method set forth in claim 5, wherein said step (c) determines the new recordable position separated as much as a lead-in area from the closed session.

15 7. The method set forth in claim 1, wherein said step (c) determines a new recordable position separated from the examined actual final position of recorded data by a predetermined amount of physical tracks.

20 8. The method set forth in claim 7, wherein the predetermined amount of physical tracks is longer than a pause section specified to be gapped between two tracks.

9. A method of searching for a recordable position of a writable disk, comprising the steps of:

25 (a) checking whether a previous recording has been done normally;

(b) examining a recording area affected by a writing beam during the previous recording based on the checked result; and

(c) determining a recordable position for new input data based on the examination result.

30 10. The method set forth in claim 9, wherein said step (a) checks whether the previous recording of either a program memory area containing information of data tracks or a lead-in area containing information of a session has been done normally.

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11. The method set forth in claim 9, wherein said step (c) closes recorded data of which recording has been done abnormally in a session, and determines a new recordable position apart from the closed session.

12. The method set forth in claim 11, wherein said step (c) determines the new recordable position separated as much as a lead-in area from the closed session.

13. The method set forth in claim 9, wherein said step (c) determines a new recordable position separated as much as a predetermined amount of physical tracks from a final position of recorded data of which recording has been done abnormally.

14. The method set forth in claim 13, wherein the predetermined amount of physical tracks is longer than a pause section specified to be gapped between two tracks.

15. An apparatus for recording and reproducing to and from a writable disk, comprising:

a pickup of writing input data and reading the written data to/from the writable disk;

a moving means of moving the pickup across the writable disk; and

a controller of controlling the moving means to move the pickup to a recordable position indicated by data recording information which was updated after previous data recording, checking whether or not data has been recorded after the indicated recordable position through examining the state of a recording surface state of the writable disk, and changing the recordable position for the new data to other position based on the checked result.

16. The apparatus set forth in claim 15, wherein the controller controls the pickup to write data necessary to close recorded data into a session if data has been recorded after the indicated recordable position.

17. The apparatus set forth in claim 15, wherein the

controller determines whether data has been recorded after the indicated recordable position based on whether the recording surface state is binary-toggling or constant.



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